

AMENDMENT UNDER 37 C.F.R. §1.111 U.S. SERIAL NO. 10/673,417

ART UNIT 2629 Q76933

AMENDMENTS TO THE SPECIFICATION

Please replace paragraph 16 with the following amended paragraph:

According to another aspect of the present invention, there is provided a plasma display panel (PDP) driving system which repeats reset, address, and sustain-discharge periods according to a switching sequence. The PDP driving system comprises a Y electrode sustaindischarge driving circuit, a separation and reset circuit, a scan pulse generating circuit, and an X electrode sustain-discharge driving circuit. The Y electrode sustain-discharge driving circuit applies a high frequency voltage of rectangular waveform to a Y electrode of the PDP, by dividing a charging mode into a first charging mode and a second charging mode, and by dividing a discharge mode into a first discharging mode and a second discharging mode, directs the Y electrode of the PDP to be charged and/or discharged through a resonance path caused by difference different inductors in the first and second charging modes, and in the first and second discharging modes, and includes a closed circuit in which a voltage difference between both ends of an inductor is greater than a predetermined value so as to eliminate a free-wheeling current, which is generated in the inductor of the resonance path due to a parasitic effect, during mode transition. The separation and reset circuit separates circuit operations, during the sustain period, from circuit operations, during other periods such as the address period and the reset period, and applies a ramp-type high voltage to the PDP during the reset period. The scan pulse generating circuit applies a horizontal synchronization signal during the address period, which is shortened during the other periods. The X electrode sustain-discharge driving circuit applies a high frequency voltage of rectangular waveform to an X electrode of the PDP, by dividing a charging mode into a first charging mode and a second charging mode and by dividing a discharging mode into a first discharging mode and a second discharging mode, directs the first and second charging modes, and in the first and second discharging modes to charge and/or discharge the Y electrode of the PDP through a resonance path including difference different inductors, and includes a closed circuit in which a voltage difference between both ends of the an inductor is greater than a predetermined value, so as to eliminate a free-wheeling current, which is generated in the inductor of the resonance path due to a parasitic effect, during mode transition.